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PHOTOGRAPHIC INTERPRETATION REPORT



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NAVIGATION AIDS AT NORTH VIETNAM AIRFIELDS

NPIC/R-39/69 MAY 1969

GROUP 1 EXCLUDED FROM AUTOMATIC DOWN GRADING AND DECLASSIFICATION

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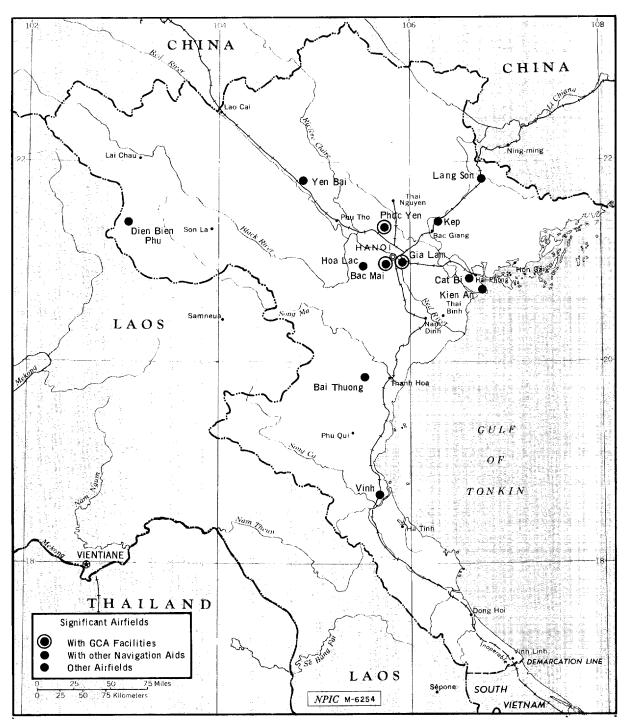


FIGURE 1. GENERAL LOCATION MAP.

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SUMMARY

Navigation aids at the major airfields in North Vietnam have been located and identified on aerial photography (Figure 1). Ground control approach (GCA) facilities, indicating an all weather capability, are observed at two, and possibly three, airfields. Other air navigation aids, indicating a lesser capability, have been identified at five other airfields. Air warning (AW) or air warning/ground control intercept (AW/GCI) facilities, which can serve as an aid to navigation, are also located near six airfields.

Basic Description

Both airfields in the Hanoi area, Gia Lam, the international airport of North Vietnam, and Bac Mai, presently inactive, possess GCA sites with GCA equipment having been observed at both (Figures 2 and 3). Two possible GCA sites, neither of which is occupied, are observed at Phuc Yen Airfield (Figure 4).

Marker beacons have been identified at eight airfields: Hanoi/Gia Lam, Phuc Yen, Haiphong/Cat Bi, Haiphong/Kien An, Hoa Lac, Kep, Bai Thuong, and Yen Bai (Figures 3-10). These beacons can serve as a standard beam approach or radio navigation aids, or as components of an instrument landing system (ILS). No complete ILS, which would provide an all weather capability, has yet been identified on photography of North Vietnam.

Marker beacons observed are of two types -- permanent and mobile. The permanent facilities consist of two antenna masts and a revetted building (usually between the antenna masts), while the mobile sites usually consist of two adjacent vehicle revetments.

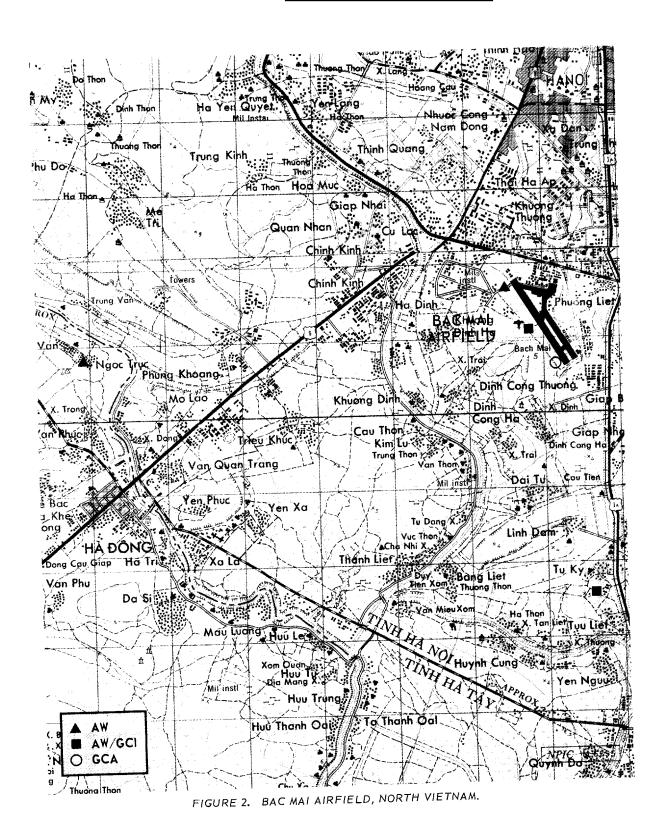
Six airfields have AW or AW/GCI facilities located within a 3-nautical-mile radius of the runway. These facilities have been occupied for varying periods of time by electronic equipment, including BAR LOCK, BIG BAR, SIDE NET, FLAT FACE, ROCK CAKE/STONE CAKE and KNIFE REST-B radars, which could serve as navigation aids.

Other aids to navigation identified at North Vietnamese airfields include a possible glide path transmitter, SMALL CROSS radars, a possible radio tower, and discone antennas.

NOTE: Only runways and primary taxiways are depicted on the graphics, dispersal areas with access taxiways are not shown.

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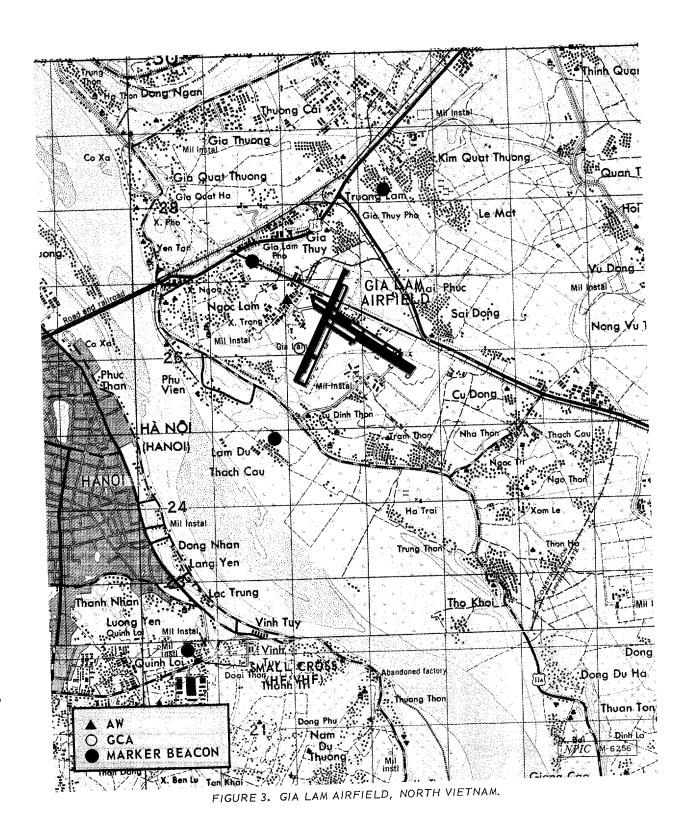
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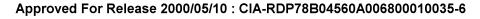
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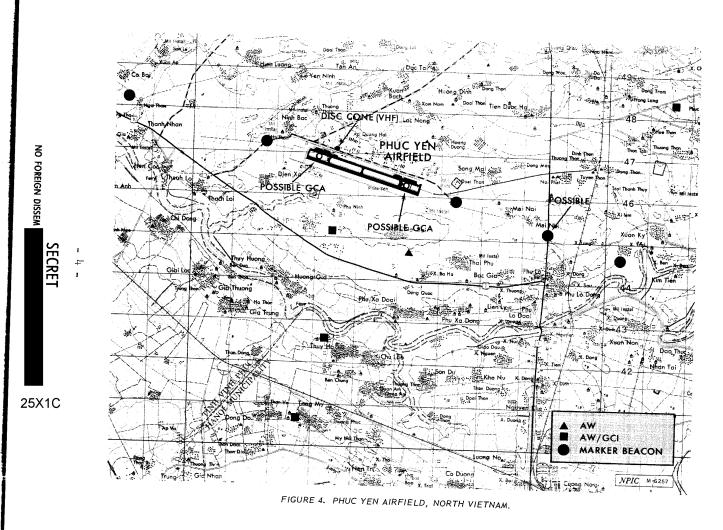
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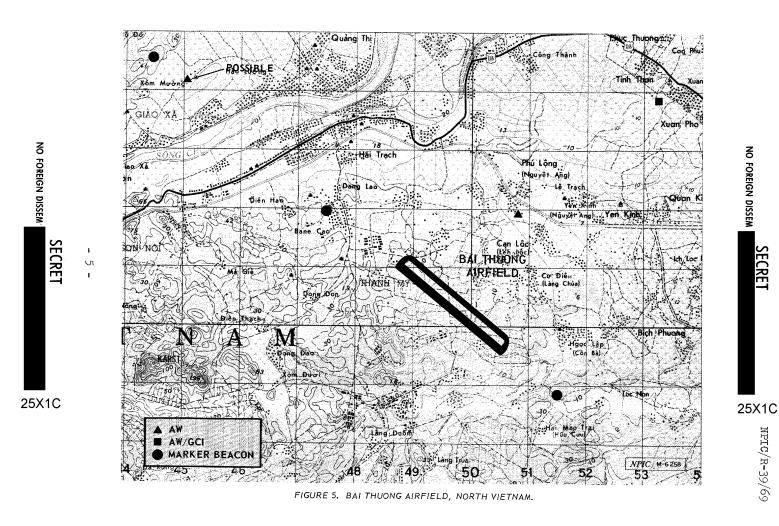


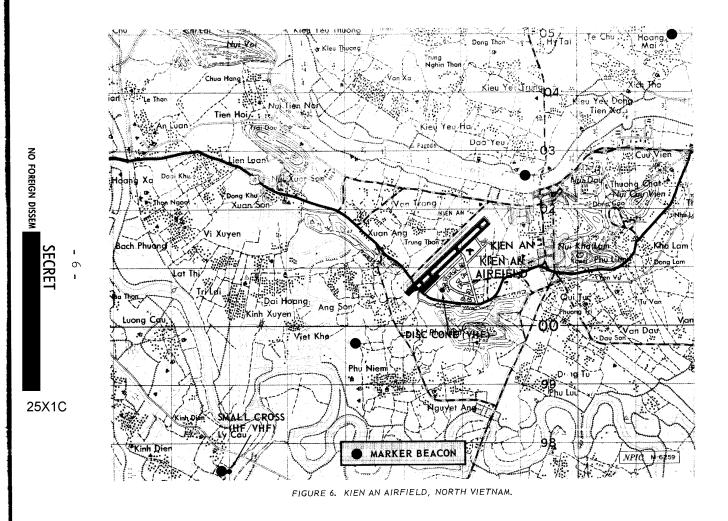
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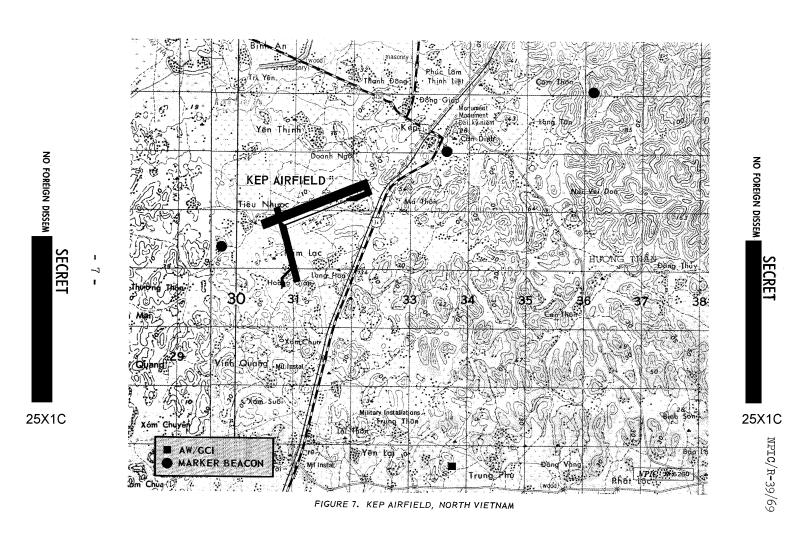


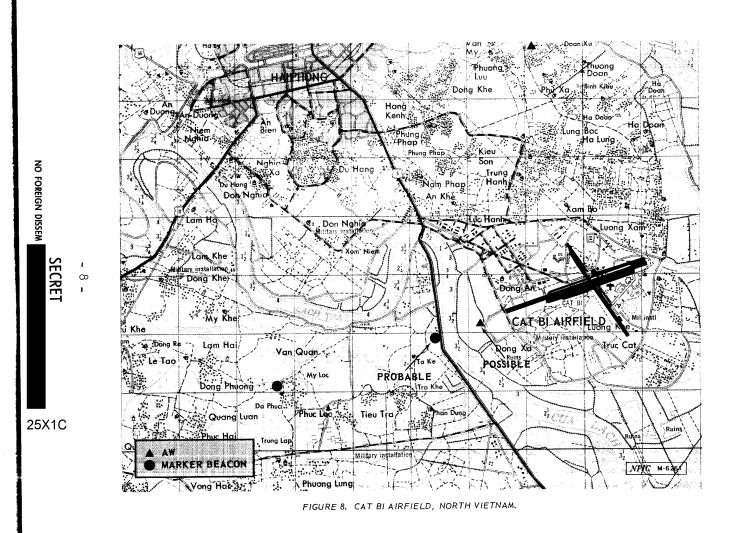
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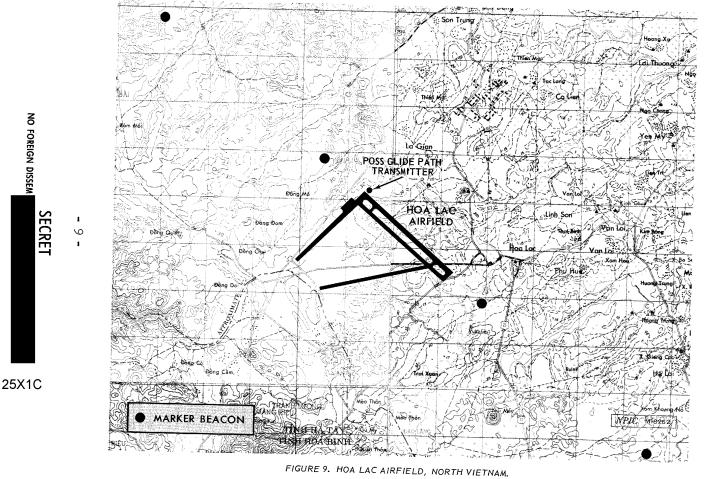




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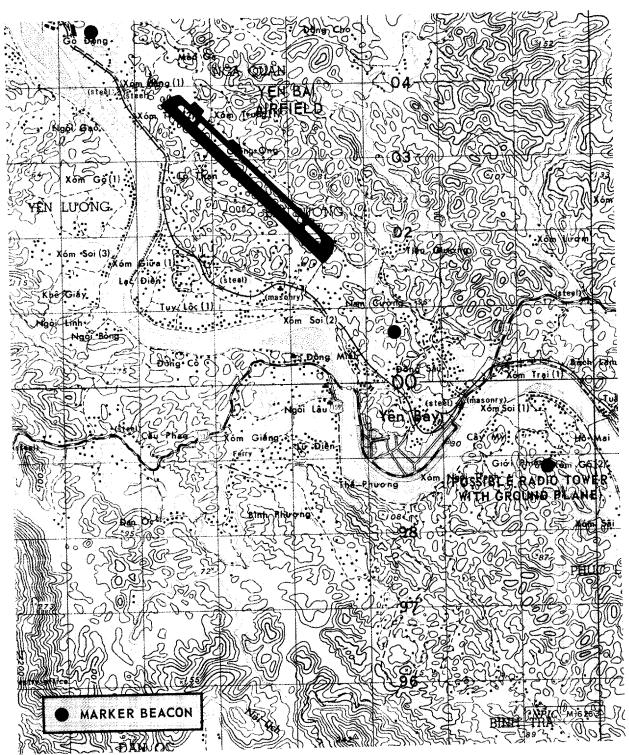


FIGURE 10. YEN BAI AIRFIELD, NORTH VIETNAM.

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